

Occupational Allergens and Dentistry (5/05)

Hamann CP, DePaola LG, Rodgers PA. Occupation-related allergies in dentistry. J Am Dent Assoc 2005;136:500–510.

Allergies to natural rubber latex (NRL) were unknown in dentistry until 1987. That changed with the publication of a report documenting NRL-based anaphylaxis in a dental worker. This case and others prompted regulatory and manufacturing changes in rubber products and increased awareness throughout the profession. However, other common dental chemicals cause allergic reactions and irritation and often are handled with insufficient precautions. Although recognition of NRL allergy has improved, awareness of other potential allergens and irritants in dentistry still is limited. Recent research indicates that the prevalence of NRL protein allergy may be decreasing. In contrast, occupation-related dermatoses associated with other dental products may be more common. Encounters with bonding agents, disinfectants, rubber, metals and detergents can cause occupation-based irritant contact dermatitis and allergic contact dermatitis. These conditions may be found in more than one-quarter of dental and medical personnel. **Therefore, dental-specific information about the recognition and management of allergic and irritant reactions is needed. The prevalence of occupation-related dermatitis may be increasing in dentistry. Reducing exposure to potential irritants and allergens and educating personnel about proper skin care are essential to reversing this trend.**

DIS Comment: Although regulatory and manufacturing changes in rubber products; increased worker awareness; and new diagnostic and management strategies can be attributed to the decreasing prevalence of type I NRL protein allergy in dentistry, occupational-related dermatoses from exposure to dental products other than latex are becoming more common. Allergic contact dermatitis and irritant contact dermatitis can result from exposure to one or more of the allergens in the dental office, such as bonding agents, disinfectants, and rubber processing chemicals. Dental health-care personnel (DHCP) need to be reminded that there are many other dental products that can cause occupational-related dermatoses besides latex. Also, DHCP should become more knowledgeable about the chemicals they use. Education on maintaining healthy skin through proper hand hygiene and use of hand care products is vital because intact skin remains the primary barrier to pathogen transmission, abrasion, and chemical irritants. DHCP experiencing occupational-related dermatitis or allergy symptoms need to obtain a definitive diagnosis by a qualified health-care professional (e.g., dermatologist, allergist) to determine the specific etiology and appropriate treatment, as well as work restrictions and accommodations where applicable. Once diagnosed, DHCP must manage occupational allergies effectively. As with any allergy, reducing exposure and avoiding the allergen are primary. In summary, the authors provide an excellent review of common occupational allergens in dentistry, and discuss strategies to successful allergy diagnosis and management.

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